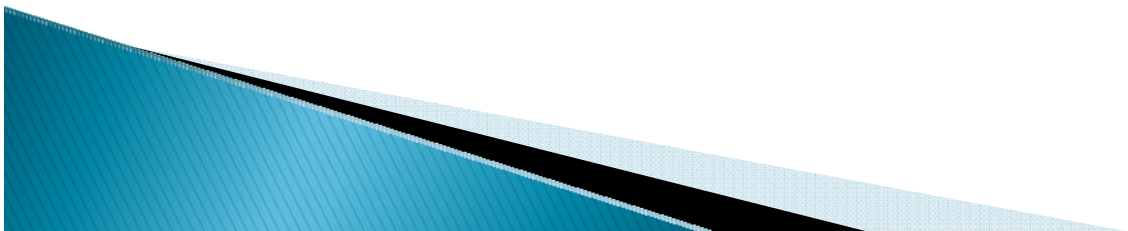# E-Hub Design Workshop

Dale Jablonsky, CIO

Agenda
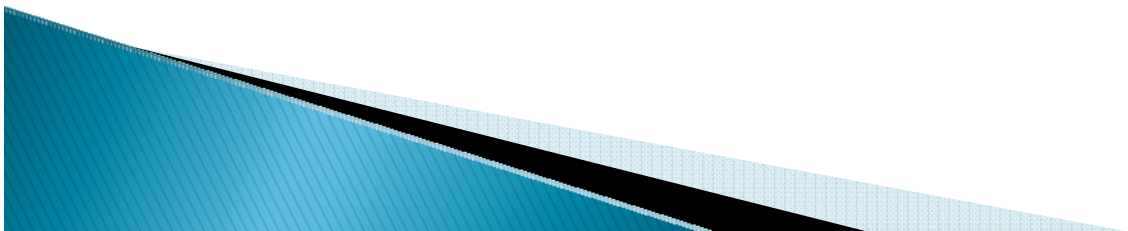
- E-Mail Systems Background
- Plan Summary
- Workshop Objectives

E-Mail Systems Background

- Mailboxes Statewide
  - Estimated 200,000 total with 150,000 in the Executive Branch

- E-mail systems – 100+ separate e-mail systems are in operation (based on preliminary analysis of 130 departments)
  - 30 email systems with over 1,000 mailboxes
  - 80 email systems with less than 1,000 mailboxes
  - E-mail systems
    - Majority Microsoft Exchange 2003
    - GroupWise – 31,000 mailboxes
    - Lotus Notes – 27,000 mailboxes
    - DTS CA.mail – 21,000 mailboxes

- E-Mail volumes (estimated)
  - Inbound messages – 10-15 million per day (~95% is spam)
  - Valid in-bound and out-bound messages – 750,000 per day
  - Inter-departmental messages – 300,000 per day
 - Intra-departmental message volumes are unknown

    Note: Attachment A provides additional detail on the larger mail systems

E-Mail Systems Background (Cont.)

- Other considerations and observations

  - Archiving/e-Discovery – limited statewide investment or policy

  - Encryption – departmental requirements exist with limited implementation

  - E-mail hygiene – variety of solutions in production

  - Inter-departmental e-mail is exposed to the public Internet and requires processing as potential spam.

  - No known e-mail audit capabilities exist to monitor confidential and inappropriate e-mail transmissions by state employees.
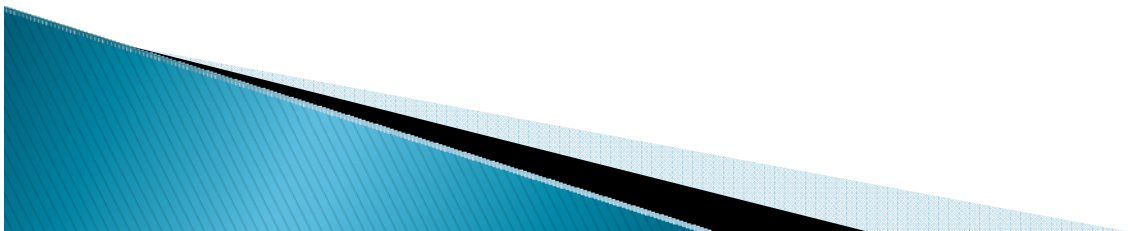
Implement Dual E-Mail Hubs for Mail Hygiene

▸ **Purpose**
  ◦ Secure and protect the State's inbound, outbound, and inter-departmental e-mail by implementing a highly available mail hygiene solution with a rich tool set and additional optional capabilities including e-mail encryption and content auditing. DTS currently provides this service for a few external customers.

▸ **Why**
  ◦ These solutions are becoming increasingly complex as the volume of Internet e-mail threats increase and become more sophisticated
  ◦ Within the State, 100+ other gateways or alternative solutions exist with varying capabilities and incident handling processes
  ◦ Should the State periodically review 100+ mail gateways or share and audit one shared solution
  ◦ Recent DTS SMTP Mail Hygiene gateway review by Evolve Technologies highlighted improvements in processes and protections
  ◦ Currently Inter-departmental e-mail is exposed to the Internet and processed multiple times – redundant and unnecessary

▸ Solution description – reference Attachments C and D

▸ **Functions:**
  ◦ Mail Hygiene (anti-spam, anti-virus, hacking)
  ◦ Protected inter-departmental e-mail service
  ◦ E-Mail encryption service as option
  ◦ E-Mail audit capability as option

# Implement Dual E-Mail Hubs for Mail Hygiene (Cont.)

▸ Benefits

- Improved security and protection of State's critical e-mail services with monitoring and formal incident handling process

- Improved quality of e-mail services

- Reduced network load as mail hygiene is performed at the network border

- Consistent toolset for email hygiene

- Consistent email hygiene policies

- Central point of administration
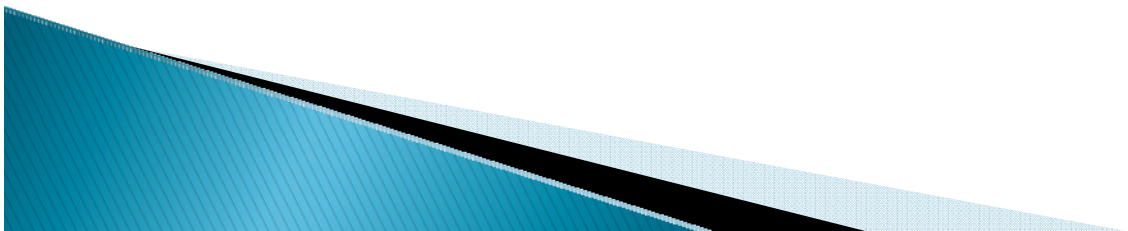
Workshop Objectives

- Understand individual department requirements
- Develop a design concept
  - Secures and protects the State's email
  - Meets individual agency requirements
  - Supports E-mail as a critical service
- Understand barriers to implementation
- Define basic support processes
- Develop migration approach and high level plan
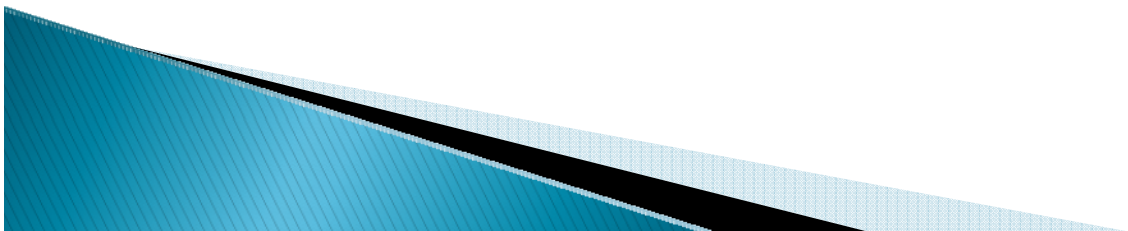
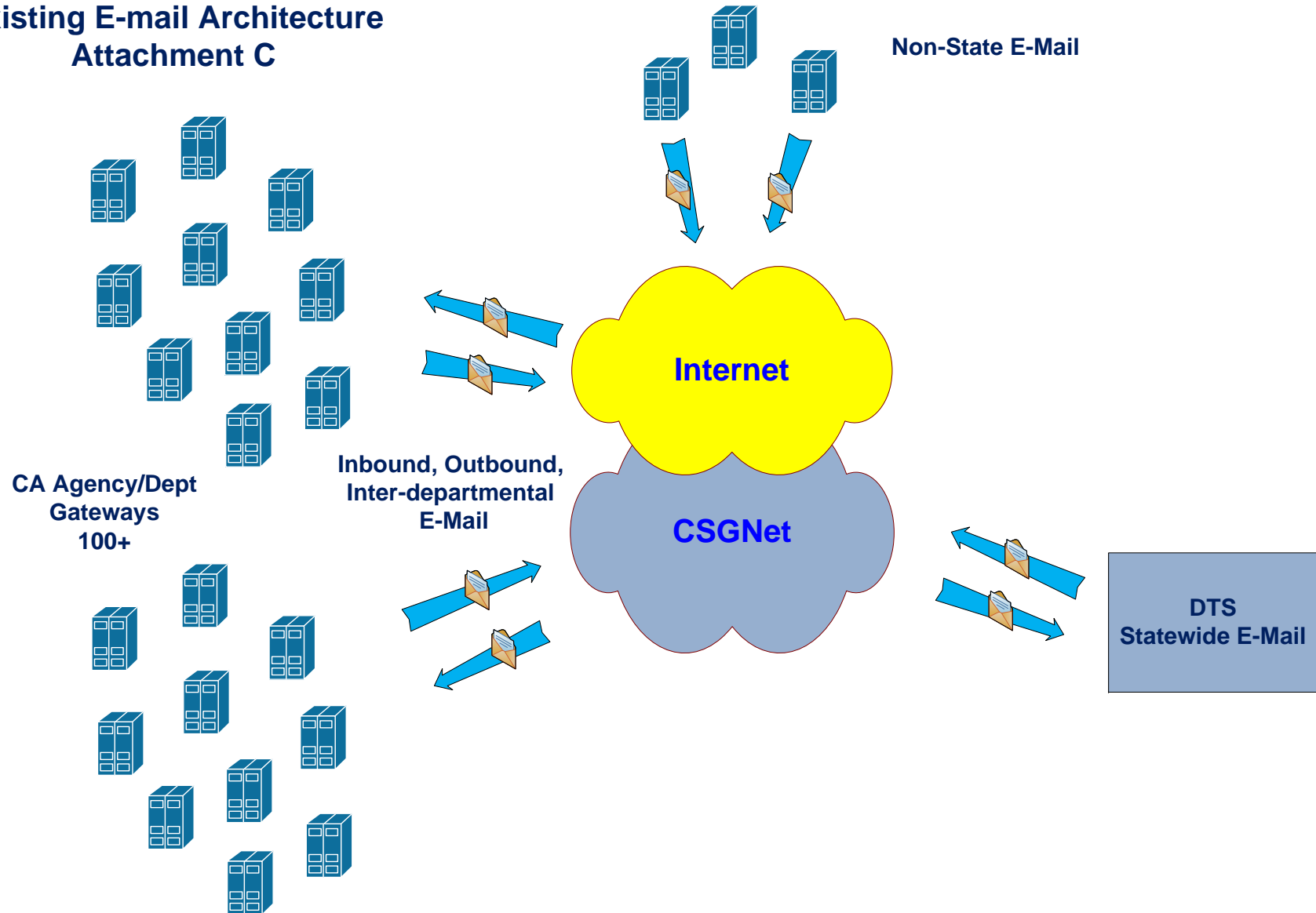# Attachments

Attachment A – Larger Executive Branch and Constitutional Officers utilizing DTS Services

Department	Email Domain	Employees	Mailbox Est	Hosted at DTS	Software
CORRECTIONS including YOUTH Authority	cdcr.ca.gov	60,529	23,000		Exchange 2003
TRANSPORTATION	dot.ca.gov	22,490	22,000		Lotus Notes
CALIFORNIA HIGHWAY PATROL	chp.ca.gov	10,325	10,000		Groupwise
EMPLOYMENT DEVELOPMENT DEPARTMENT	edd.ca.gov	8,463	9,200	yes	Exchange 2003
DEVELOPMENTAL SERVICES	dds.ca.gov (CO on	8,137	8,000	yes (HQ only)	Groupwise
FRANCHISE TAX BOARD	ftb.ca.gov	6,286	8,000		Exchange 2003
PARKS AND RECREATION	parks.ca.gov	4,891	7,500		Exchange 2003
MOTOR VEHICLES	dmv.ca.gov	9,593	6,000		Exchange 2003
FORESTRY AND FIRE PROTECTION	fire.ca.gov	5,391	5,300		Exchange 2003
MENTAL HEALTH	dmh.ca.gov	10,942	5,000		Groupwise
CONSUMER AFFAIRS	dca.ca.gov	4,830	4,800		Lotus Notes
GENERAL SERVICES	dgs.ca.gov	4,133	4,500		Exchange 2003
DEPARTMENT OF PUBLIC HEALTH	cdph.ca.gov	3,326	4,500		Exchange 2003
SOCIAL SERVICES	dss.ca.gov	4,331	4,000	yes	Exchange 2003
BOARD OF EQUALIZATION	boe.ca.gov	3,906	4,000		Exchange 2003
HEALTH SERVICES	dhcs.ca.gov	2,900	4,000		Exchange 2003
WATER RESOURCES	water.ca.gov	2,888	3,000		Exchange 2003
INDUSTRIAL RELATIONS	dir.ca.gov	2,830	3,000		Exchange 2003
FISH AND GAME	dfg.ca.gov	2,904	2,900		Groupwise
EDUCATION	cde.ca.gov	2,900	2,900		Exchange
FOOD AND AGRICULTURE	cdfa.ca.gov	2,643	2,600		Groupwise
Child Welfare System	cws.state.ca.us		2,100	yes	Exchange 2003
REHABILITATION	dor.ca.gov	1,938	1,900		Exchange 2003
VETERANS AFFAIRS	cdva.ca.gov	1,892	1,900		Exchange 2003
WATER RESOURCES CONTROL BOARD	swrcb.ca.gov	1,550	1,600		Groupwise
AIR RESOURCES BOARD	arb.ca.gov	1,232	1,600	yes	Exchange 2003
CALIFORNIA CONSERVATION CORPS	ccc.ca.gov	1,503	1,500		Exchange 2003
STATE CONTROLLER'S OFFICE	sco.ca.gov	1,301	1,400		Exchange 2003
TOXIC SUBSTANCES CONTROL	dtsc.ca.gov	994	1,400		Groupwise
DEPARTMENT OF TECHNOLOGY SRVS	dts.ca.gov	735	1,300		Exchange 2007
INSURANCE	insurance.ca.gov	1,218	1,200		Exchange 2003
		Total Mailboxes	160,100		
DTS Hosted Larger Depts.			17,500		

Existing E-mail Architecture Attachment C

Non-State E-Mail

Internet

CSGNet

CA Agency/Dept Gateways 100+

Inbound, Outbound, Inter-departmental E-Mail

DTS Statewide E-Mail

E-Mail Hub Architecture
Attachment D

Internet

Primary Mail Hub

Secondary Mail Hub

Agency/Department E-Mail Systems

DTS Statewide E-Mail